

REMARKS/ARGUMENTS

This Amendment & Response is intended to fully reply to the office action mailed February 3, 2009. In this office action claims 1-3, 6-8, 10, 11, 16-23 and 31-42 were examined, and all claims were rejected. More specifically, claims 1-3, 6-8, 10, 11, and 34-42 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated over U.S. Patent No. 5,832,514 to Norin (hereinafter “Norin”). Claims 16-23 and 31-33 were rejected under 35 U.S.C. § 103(a) as allegedly obvious in view of U.S. Patent No. 5,787,262 to Shakib (hereinafter “Shakib”), U.S. Patent No. 6,938,084 to Gamache (hereinafter “Gamache”), and Norin.

Claims 1, 16, 31, and 34 have been amended. No claims are being canceled or newly added. Reconsideration of these rejections, as they might apply to the original claims in view of these remarks is respectfully requested.

Claim Rejections – 35 U.S.C. § 102(a)

Claims 1-3, 6-8, 10, 11, and 34-42 were rejected under 35 U.S.C. § 102(a) as being anticipated by Norin. Applicants respectfully traverse this rejection because Norin fails to teach all of the elements of the claims.

As amended, claim 1 recites, *inter alia*:

receiving a first fence value and first meta-data of the first member of a replica set, wherein the first fence value *is independent of any change made to content of the first member of the replica set and is used to resolve a conflict between information in the first member of the replica set and information in the second member of the replica set*

This feature is not taught or suggested by Norin. The office action alleges that the “affinity value” of Norin corresponds to the claimed fence value. As noted below, Norin’s affinity value is not used “to resolve a conflict between information in the first member of the replica set and information in the second member of the replica set,” as the fence value claimed in claim 1.

Norin describes a process for discovery based data recovery used during store and forward replication. The process keeps track of replication data broadcast from one server to one or more other servers, and for quickly and efficiently recovering lost or missing replication data

when using a store and forward replication process among multiple users connected together on a computer network. Missing data is retrieved from one of the replica nodes in the network.

An affinity value is used in the process of deciding which replica node will supply any missing data. The affinity value is not used “to resolve a conflict between information in the first member of the replica set and information in the second member of the replica set.” Affinity is defined by Norin as “[s]ite-to-site cost, as assigned or specified by a network administrator, for transferring data from one site to another.” *Norin*, col. 3, lns. 50-53. Norin indicates that “affinity values represent the site-to-site cost for transferring data from one site to another. In the preferred embodiment, affinity values are generally assigned by a system administrator and all nodes at a particular site usually have the same affinity value.” *Norin*, col. 22, lns. 7-14. The affinity values are merely used to determine which node will be used to retrieve missing data. Norin states that “[i]f there are no nodes in the local site which have the needed data, nodes with the lowest affinity values are selected next. Recall that affinity is a measure of the cost to access data from a node and is typically assigned by a system administrator. Again, if several nodes have the same affinity, the load should be balanced by selecting them seriatim or through the use of some other priority mechanism.” *Norin*, col. 22, lns. 48-55. Norin’s affinity values are thus not the same as the claimed fence values, which in addition to other features are also used “to resolve a conflict between information in the first member of the replica set and information in the second member of the replica set.” For at least this reason, claim 1 is allowable over Norin. Claims 2, 3, 6-8, 10, and 11 depend, directly or indirectly, upon one of claims 16 and 31 and are therefore allowable for at least the same reasons.

Claim 34 recites, *inter alia*:

receiving a first fence value and first meta-data of a first member of
a replica set, wherein the first fence value is independent of any change
made to content of the first member of the replica set and is used *to resolve*
a conflict between information on the first machine and information on the
second machine

For reasons similar to the reasons indicated above, Norin fails to teach a fence value as claimed in claim 34. Norin does not teach a fence value which in addition to other features is used “to resolve a conflict between information on the first machine and information on the second

machine” as claimed in claim 34. Claim 34 and dependent claims 35-42 are patentable over Norin.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 16-23 and 31-33 were rejected under 35 U.S.C. § 103(a) as being allegedly obvious in view of Shakib, Gamache, and Norin. Applicants respectfully traverse this rejection because the combination of references fails to teach fence values as claimed. Specifically, the references fail to teach fence values that are used to resolve a conflict between information of a first machine and information of a second machine. The office action relies on Norin’s affinity values for showing the claimed fence value.

Claim 16 recites, *inter alia*:

determining whether a first resource residing on a first machine should be used to update a second resource residing on a second machine, each resource associated with a fence value, meta-data, and content, each meta-data including one or more fields that are updated whenever the content of the associated resource is changed and, each fence value indicating whether its associated resource should be used to update a resource on another machine, the fence value having precedence over the meta-data, wherein each fence value is independent of any change made to content of its associated resource *and is used to resolve a conflict between information on the first machine and information on the second machine*

As noted above with respect to claim 1, Norin’s affinity values do not anticipate the claimed fence values. Norin fails to teach a fence value that, in addition to other features, “is used to resolve a conflict between information on the first machine and information on the second machine,” as claimed in claim 16. The office action acknowledges that Shakib does not compensate for the deficiency in Norin. *See Office Action (February 3, 2009)*, p. 9. Gamache does not compensate for the deficiency in Shakib and Miloushev. Gamache describes a method and system for organizing a cluster of servers. Gamache does not however describe a fence value that is “independent of any change made to content of its associated resource and is used to resolve a conflict between information on the first machine and information on the second

machine.” For these reasons, claim 16 and dependent claims 17-23 are patentable over the combination of cited references.

Claim 31 recites, *inter alia*:

a second machine having a second set of resources, wherein each resource on each machine is associated with a fence value, meta-data, and content, each meta-data including one or more fields that are updated whenever the content of the associated resource is changed and, each fence value indicating whether its associated resource should be used to update a resource on another machine independently from other meta-data and each fence value being independent of any change made to content of its associated resource and *being used to resolve a conflict between information on the first machine and information on the second machine*

For similar reasons as noted above with respect to claim 16, the cited references fail to teach the claimed fence value of claim 31. As indicated above, Norin’s affinity values do not anticipate the claimed fence values and Shakib and Gamache fail to compensate for the deficiency. Claim 31 and dependent claims 32 and 33 are the patentable over Norin, Shakib, and Gamache.

Conclusion

This Amendment & Response fully responds to the office action mailed on February 3, 2009. Still, the office action may contain arguments and rejections that are not directly addressed by this Amendment & Response because they are rendered moot in light of the preceding arguments in favor of patentability. Hence, failure of this Amendment & Response to directly address an argument raised in the office action should not be taken as an indication that the argument has merit. Additionally, failure to address statements/comments made by the Examiner does not mean that the Applicants acquiesce to such statements or comments. Furthermore, the claims of the present application may include other elements, not discussed in this Amendment & Response, which are not shown, taught, or otherwise suggested by the art of record. Accordingly, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

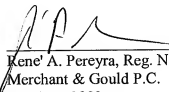
It is believed that no fees are due with this Amendment & Response. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayment with respect to this patent application to deposit account number 13-2725.

In light of the above remarks, it is believed that the application is now in condition for allowance and such action is respectfully requested. Should any additional issues need to be resolved, the Examiner is requested to telephone the undersigned to attempt to resolve those issues.

Respectfully submitted,

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